PDS Standards Reference Change Log

Version	Section	Change
3.1	1.1	PDS Data Policy added
	2.3	Reference coordinate standard expanded to support body-fixed rotating, body-fixed non-rotating, and inertial coordinate systems.
	2.4	Ring coordinate standard added.
	3.0	List of internal representations of data types moved to Appendix C
	3.2	EBCDIC_CHARACTER added to PDS Standard data types
	5.2.3	Minimal label option described
	6.3	Data set collection naming -- data processing level component made optional
	6.4	Data set naming -- added support for SPICE and Engineering, where no instrument component applies
	10.0, ALL	PDS use of UNIX/POSIX forward slash separator for path names. VMS-style bracket notation replaced.
	10.2.1	Required file names for catalog objects included
	12.5.4.2	PDS use of double quotes clarified
	13.2	Use of Primitive objects described
	14	New chapter -- Pointer Usage
	17	New chapter -- PDS Usage of N/A, UNK, and NULL
	19	Logical Volume organization added
	Appendix A	Primitive Objects added
	Appendix A	Header object -- required and optional keyword lists changed Container object -- Column no longer a requried sub-object

	Appendix B	Streamlined Catalog Object Templates with examples replace 3.0 set
	Appendix C	New appendix containing internal representations of data types (moved from Chapter 3)
	Appendix D	Outline and example for AAREADME.TXT added
	Appendix E	Version 3.0 Acronyms and Abbreviations modified and moved to this Appendix. Spelling and Word Usage section deleted.
	Index	The document now features an index.
	ALL	No other substantive changes have been made to the standards since the release of Version 3.0. Throughout the document, clarifications have been made, typos corrected, some sections have been rearranged, and new examples have been supplied.

Version	**Section**	**Change**
3.2		Release Date: 7/24/95
	5.1.2	Label format discussion added Noted that values in labels should be upper case (except descriptions). Fixed examples in Appendix A.
	5.2.3, Appendix A	Noted that for data products using minimal labels, DATA_OBJECT_TYPE = FILE in the Data Set Catalog Template
	6	Added target IDs for DUST and SKY Added instrument component values SEDR and POS Noted that Data Set and Data Set Collection IDs and Names should be upper case. Fixed examples.
	8 and 19	Listed CALIB and GEOMETRY as recommended directory names (as opposed to required).
	8.2	SOFTWARE Subdirectory naming recommendation added
	9.1	Volumes may contain multiple versions of VOLINFO

9.2.1	Increased maximum line length in text file to 78 characters plus CR/LF
10.1	Clarified file name spcification. Noted that file name must be upper case and that full stop character required
10.2	Added recommendation that file extension identify the data type of a file. Added .QUB as reserved file extension for spectral image qubes. Added SPICE file extensions to reserved file extension list. catalog pointer name and file name: SWINV.CAT Added LABINFO.TXT to list of required xxxINFO.TXT files. Added recommended xxx INFO.TXT file names for SOFTWARE subdirectories.
10.2.3 and 5.1	added note that detached label file (*.LBL) should have the same base name as the associated data file
11.1.1	Added PDS Extended Attribute Record (XAR) policy
11.1.2	Added recommendation that CDs be premastered using single-session, single-track format.
11.1.3	Added section on Packaging Software files on a CD-ROM
14.1.2	Added new example of structure pointer
15	Added recommendation that for VAX/VMS-compatible CDs, fixed length and variable length files be an even number of bytes. Removed reference to VMS restriction to an even number of bytes in section 15.2
15.1	Removed discussion of use of BLOCK_BYTES and BLOCKING_TYPE (since this data element not in PSDD)
15.3	Added notation that CR/LF is required line terminator for PDS label and catalog files
15.5	Reworded first sentence.
17.2	Allow definition of numeric constants representing N/A, UNK, and NULL to be defined for use in an INDEX table.
18	replaced reference to PDS V1.0 with a general statement

19	Added SOFTWARE subdirectory recommendations
19	Recommend that an archive volume be based on a single version of the PDS standards. Volume organization guidelines added.
19.2	Clarified requirements for files & directories when logical volumes used
19.3	INDEX table standard update
19.3	use of axx- and bxx- prefixes in required file names clarified
19.4, Appendix A	fixed examples--Volume and Volume set names capitalized
19.5.1	Volume set ID formation rule modified.
Appendix A	updated COLUMN, BIT_COLUMN, and HISTOGRAM objects required and optional keyword lists to be consistent with Table 3.1
Appendix A	Added ALIAS and INDEX_TABLE objects
Appendix A	Added examples of COLUMN objects having ITEMs
Appendix A	Clarified use of ROW_SUFFIX_BYTES and ROW_PREFIX_BYTES for SPARE fields in Tables with fixed length records
Appendix A	Clarified the requirements for VOLUME objects for Logical volumes
Appendix A	Fixed examples using HEADER object to conform to current standard. Modified description of Header object to eliminate confusion..
Appendix B	Inventory, Software_Inventory and Target templates added
Appendix B	Removed incorrect example of use of Personnel template
Appendix D	INDXINFO.TXT and SOFTINFO.TXT outlines and examples added
Appendix D.1	Modified example of AAREADME.TXT to include rules on how pointer statements are resolved.

	Appendix E and F	Added Appendix E - NAIF Toolkit Directory Structure. Acronyms and Abbreviations moved to Appendix F.
	ALL	corrected typos, clarified text, added rationale for some standards, updated examples to conform to latest standards
	Change Log	Version 3.1 change log updated--some items were missing

Version	Section	Change
3.3		Release Date: 6/1/99
	1.0	Added DVD as new medium
	1.3	Changed Version to 3.3
	1.6	Updated/corrected references
	1.7	Added reference to PDS web page
	2.0	Added definition for IAU
		Clarified text
	2.3	Corrected punctuation
	2.7	Fixed punctuation for references
	3.4	Corrected punctuation
	3.7	Corrected spelling and punctuation
	4.0	Added Section headers for Primary & Secondary Objects
	4.1	Corrected paragraph formatting
	5.1.2	Added paragraph about ASCII character set
		Added paragraph about Label Padding
		Fixed math in calculating start byte of 8th record
		Aligned keyword/values
	5.2.2	Corrected grammar
	5.2.3	Removed "'"in the Data Set catalog template.
	5.3.1	Changed Version to 3.3
	5.3.2	Modified last paragraph
	5.3.3	Listed examples of primary and secondary objects
	5.3.3.2	Changed 'bottom' to 'following'
	5.3.4	Removed AMMOS as an example
	5.3.4.1	Removed SPACECRAFT_NAME as valid keyword
	5.3.4.3	Removed SPACECRAFT_NAME as valid keyword.
	5.3.5	Changed PDS has developed and continues to develop...
		Added example for a pointer (^DESCRIPTION)
	5.3.6	Aligned keyword/values
		Clarified statement
	5.3.7	Changed: needed for conformance
	6.0	Prioritized organizations that PDS works with
	6.1	Provided definition for Data Set Collection and removed MGN example.

	Corrected spelling (considerations) and punctuation
6.2	Added acronyms for data set name and identifier
6.3	Changed paragraph from future tense to past tense
6.4	Section 5 - comets
	Section 6 - added acronyms to list
	Section 6 - corrected spelling (ephemeris)
	Section 7 - corrected spelling (gravity)
	Section 8 - clarified version number rules
7.0	Updated paragraph
7.1	Clarified statements about date/time formats
7.2.1	Added PDS preference for convention
7.3.1	Corrected grammar
	Reformatted paragraph
7.3.2	Corrected grammar
	Updated paragraphs
8.1	Corrected grammar (standards directory)
	Added EXTRAS directory
	Added Browse and Data directory descriptions
8.2	Section 4 - Better examples of directory names
	Section 5 - Reformatted paragraph
	Section 8 - Corrected spelling and grammar
8.3	Changed to valid keywords
8.4	Corrected grammar (data are)
9.0 - 9.3.3	Complete rewrite of Documentation Standard
	Added HTML standards
10.0 - 10.1	Added ISO 9660 Level 2 description
	Added ";1" to Level 1 description
10.2.1	Clarified required file names paragraphs
	Added TARGET_CATALOG pointer to list
10.2.2	VOLDESC.SFD file becomes deprecated
10.2.3	Described detached label
	Corrected grammar (its)
10.2.4	Added extensions and changed SPICE extensions
	Corrected spelling (postscript) and grammar (data that have)
11.1.1	Changed chapter name
12.1	Aligned equal signs
12.1.1.1	Added reference
12.2	Reformatted paragraph
12.3	Spelling
12.3.1	Corrected punctuation (1.234E2)
12.3.1.2	Corrected value (16#+4B#)
	Reformatted paragraph
12.3.1.3	Corrected value (1.234E3)
12.3.2	Updated paragraphs
12.3.2.1	Clarified date format
12.3.2.3	Clarified paragraph

12.3.2.4	Changed year to 4 digits
12.3.2.5	Updated paragraph
12.3.2.5.1	Corrected value (1990-158T15:24:12z)
12.3.3.1	Corrected value ("::=")
12.3.4	Added examples
12.3.5	Corrected punctuation and grammar (units)
12.4	Corrected punctuation
12.4.1	Corrected grammar (the the)
	Aligned equal signs
12.4.2	Aligned equal signs
12.5.2	Reformatted asterisks to not be superscript
	Corrected value (60.15)
12.5.3.1	Corrected grammar (affect)
	Reformatted paragraphs
12.5.4	Corrected value (IO)
	Added valid quoted strings
12.5.4.1	Clarified paragraph
12.5.5	Reformatted asterisk to not be superscript
	Corrected spelling (eccentricity)
	Changed to valid keyword
12.5.6	Corrected value (removed 1st bracket "[")
	Changed to valid keyword
12.6	Reformatted paragraphs
12.7	Reformatted paragraphs
12.7.1	Corrected grammar (sections detail)
12.7.2	Corrected grammar ("is that are")
13.1	Added required keywords to definition
14.1.1	Corrected grammar (occurs)
14.1.2	Corrected punctuation
	Corrected value (^STRUCTURE)
	Changed paragraph numbering
14.2	Reformatted pointer rules
15.0	Reformatted paragraph and table
15.2	Changed paragraph numbering
15.3	Changed paragraph numbering
16.0	Corrected grammar
16.2	Clarified paragraph
	Changed case of #mark#
17.1	Changed case of title (and)
17.1.2	Corrected punctuation (information)
17.2	Corrected case of title (and)
18.0	Corrected SI Units (electricity potential, etc)
	Updated paragraph
19.1	Corrected grammar (volume types)
	Corrected grammar (up to the)
19.3	Corrected grammar (an SFDU)

	Corrected spelling (global)
	Updated Catalog and Index definitions
	Added description of the EXTRAS directory
	Added Preferred Method for supplying PDS catalog objects
19.4.1	Corrected grammar (data have been)
	Changed case of value (ID)
19.5	Corrected spelling (radiometry)
	Corrected value (VOLUME_SET_NAME)
	Corrected value (VOLUME_SET_ID)
19.5.1	Reformatted paragraph
19.7	Corrected case of value (IDs)
20.0 - 20.6	Complete rewrite of Zip Compression
Appendix A	Added URL to Cold Fusion pages
A.1	Updated definition for ALIAS
	Corrected spelling (subobject)
A.2	Added and changed Optional keywords
	Reformatted paragraphs
	Corrected spelling (the time)
A.3	Changed Optional keywords
	Corrected spelling (created)
A.5	Added TARGET to Optional Objects
	Clarified use of CATALOG.CAT
	Formatted paragraph
A.7	Formatted paragraph
	Changed Optional keywords
A.8	Updated paragraph
A.10	Changed case of keyword values to uppercase
A.11	Corrected grammar (on a)
	Corrected grammar (on the medium)
A.12	Removed incorrect statements
	Updated example
A.13	Changed Optional keywords
A.14	Removed a Required keyword
	Added Optional keywords
A.15	Changed value to keyword (GAZETTEER_TABLE)
	Corrected grammar (the breath & upper right)
	Added Optional Keywords section
	Added Optional Objects section
	Added trailing double quote to DESCRIPTION section
A.16	Corrected paragraph to reflect proper file name
	Changed value to be enclosed in double quotes
A.18	Added Required and Optional Keywords and Objects sections
A.19	Added BAND_NAME keyword
	Added Optional keyword
	Changed values to be keyword (CHECKSUM)
	Changed values to be keyword (SCALING_FACTOR)

C.5	Corrected spelling (exponent-as-stored)
C.10	Corrected spelling (imaginary)
Appendix E	Corrected sentence (source code for)
	Corrected spelling (spacit)
	Corrected grammar (These data are)
	Corrected punctuation
Appendix F	Corrected CD-WO nomenclature
	Added DE (Data Engineer)
	Corrected spelling (Principal)
Appendix G	Added SAVED Data as new section